Application No.: 09/598,372

Amendment dated October 31, 2003

Reply to Office Action dated July 31, 2003

The Claims:

1. (currently amended) A receiver Receiver for code distribution multiple access transmission and parallel multiple access interference suppression, the receiver comprising:

at least one multiple access interference suppression stage (ESli) constituted by K channels, each comprising a correlation means (101, 102, 103) corresponding to a particular pseudorandom sequence and interference generation (111, 112, 113) and suppression (121, 122,123) means, each stage delivering to the following stage K signals (ri1, 1r2, ri3) at least partly freed from multiple access interferences,

a final, decision stage (ED) constituted by K channels receiving the K signals from the K channels of the preceding suppression stage and each comprising a correlation means (141, 142, 143) corresponding to one of the pseudorandom sequences and decision means (151, 152, 153) delivering a data item (dl, d2, d3),

means (131, 132, 133) for producing synchronization signals able to control the interference suppression means,

means (161, 162, 163) for producing synchronization signals able to control the decision means (151, 152, 153) of the final stage (ED), said receiver being characterized in that the means for producing the synchronization signals are constituted by K means (171, 172, 173) solely placed in the K channels of the final stage (ED), the K synchronization signals produced by said K means controlling the K decision

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means (151, 152, 153) of the K channels of the final stage (ED) and the interference estimation means (111, 112, 113) of the K channels of the at least one interference suppression stages (ESli) following appropriate time shifts (181, 182, 183).

- 2. (currently amended) Receiver according to claim 1, wherein the K synchronization signals also control the K correlation means (101, 102, 103).
- 3. (currently amended) Receiver according to claim l, wherein the K correlation means (141, 142, 143) of the K channels of the final stage (ED) are constituted by K matched filters with K pseudorandom sequences and the K correlation means (101, 102, 103) of the K channels of each interference suppression stage (ESII) (ESI_i) are constituted by K sliding correlators.